English

USER MANUAL

TB-3 DMX-Roller

CAUTION!!
Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!

For your own safety, please read this user manual carefully before you initial start-up.

Every person involved with the installation, operation and maintenance of this device have to:
- be qualilfied
- follow the instructions of this manual

INTRODUCTION

Thank you for having chosen a EUROLITE TB-3. You will see you have acquired a powerful and versatile device.

Unpack your TB-3.

Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

SAFETY INSTRUCTIONS

CAUTION!
Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

Important:
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!

Make sure that the available voltage is not higher than stated on the rear panel.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

Caution: During the operation, the housing becomes very hot.

Do not switch the device on and off in short intervals as this would reduce the lamp's life.

HEALTH HAZARD!
Never look directly into the light source, as sensitive persons may suffer an epileptic shock (especially meant for epileptics)!

Please consider that damages caused by manual modifications to the device are not subject to warranty.

Keep away children and amateurs!

OPERATING DETERMINATIONS

This device is a lighting effect for creating decorative effects. This product is only allowed to be operated with an alternating voltage of 230 V, 50 Hz and was designed for indoor use only.

Do not shake the device. Avoid brute force when installing or operating the device.

When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!

The minimum distance between light-output and the illuminated surface must be more than 0.5 meters.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.

Always fix the fixture with an appropriate safety-rope.

The maximum ambient temperature t_a = 45° C must never be exceeded.

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!

Please use the original packaging if the device is to be transported.

Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

Never remove the serial barcode from the device as this would make the guarantee void.

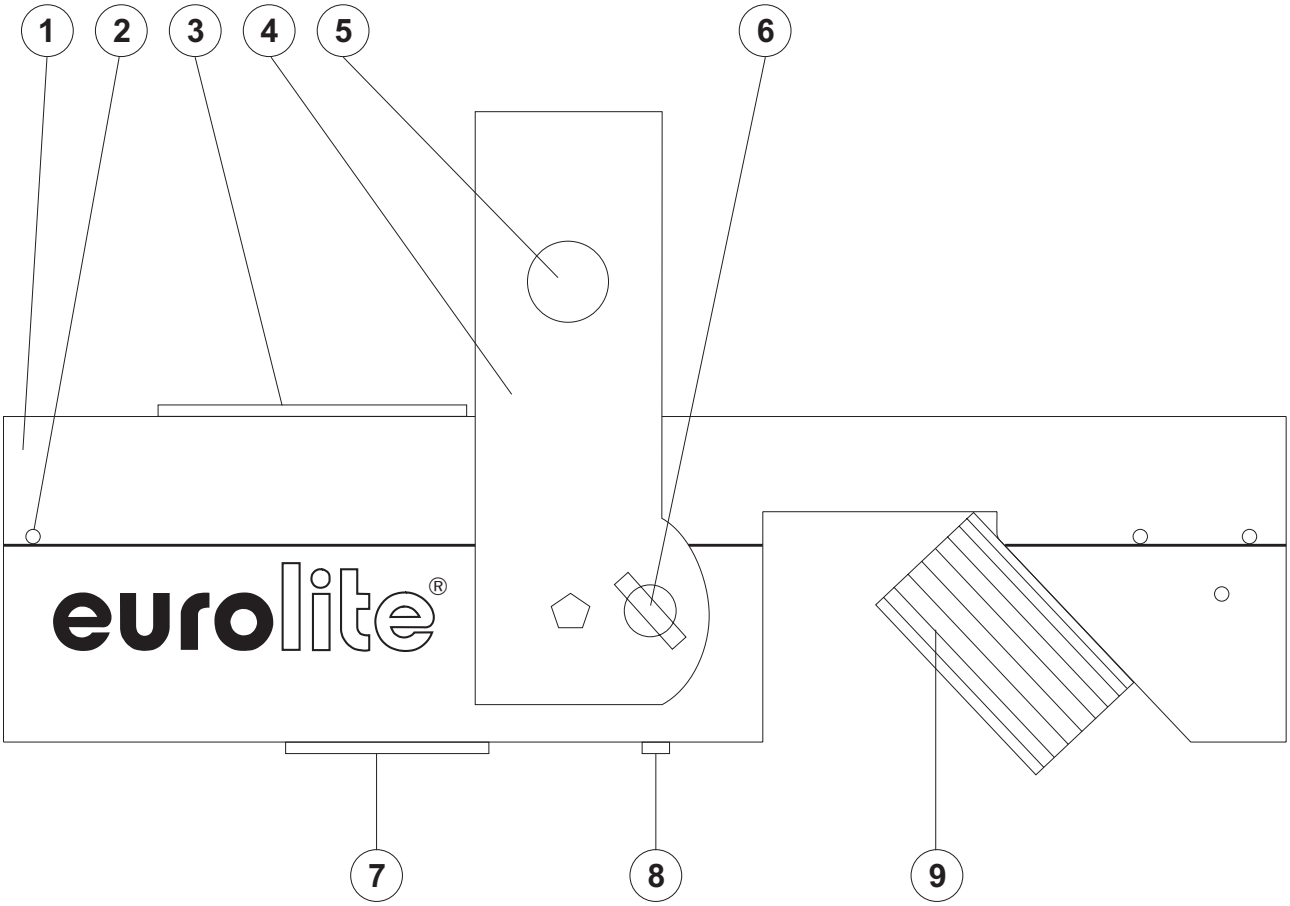
If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, lamp explosion, crash etc.

DESCRIPTION OF THE DEVICE

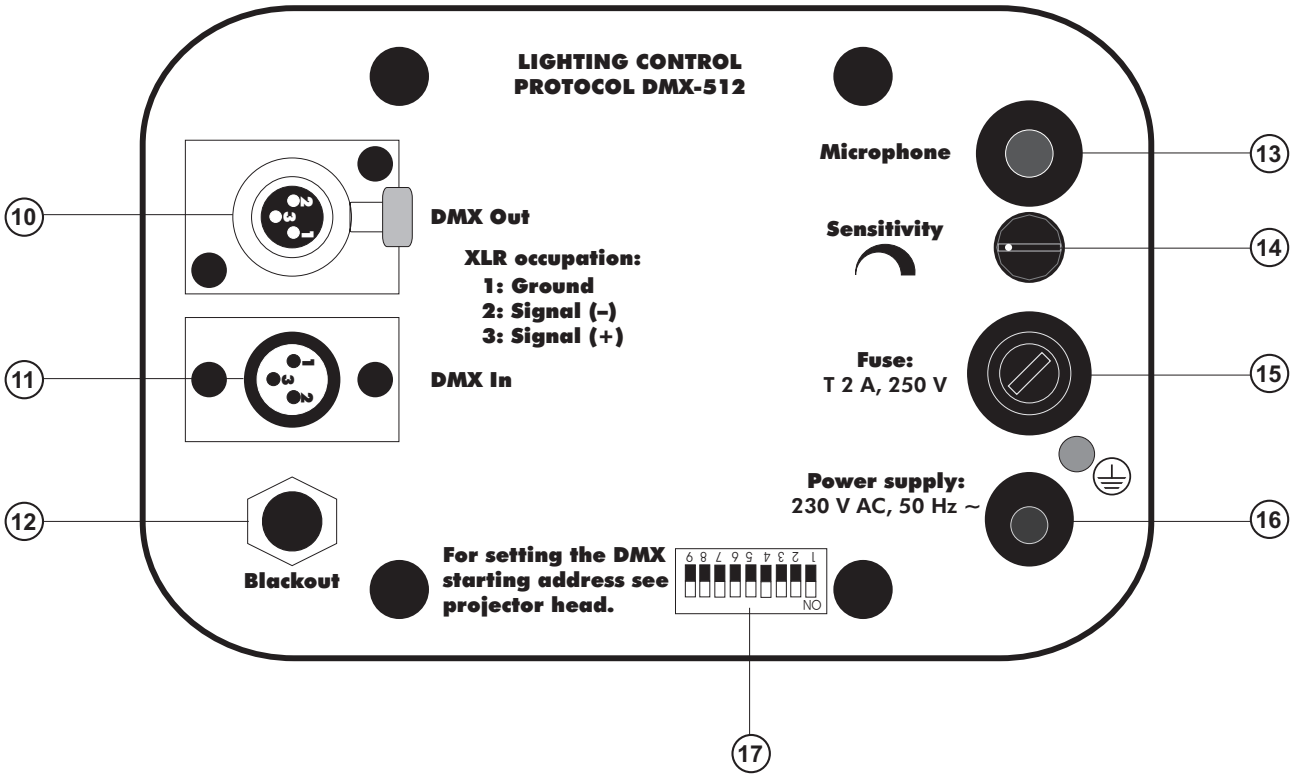
Features

Inexpensive mirror cylinder effect
1 colour-wheel with 7 dichroic colour-filtres and white • 1 Gobo-wheel with 9 gobos, 1 bicolor-gobo and open • Manual focus • Strobe-effect with adjustable speed (1-5 flashes/sec.) • DMX-control via every standard DMX-controller • 4 DMX-control-channels required • Sound-controlled via built-in microphone • Microphone-sensitivity adjustable via rotary-control • Master/Slave-function • 4 high-quality stepping-motors • Automatic lamp off during blackout or when sound-signal is missing • EFR 15 V/150 W lamp included in the delivery

Overview



(1) Housing cover
(2) Housing screws
(3) Ventilation fan
(4) Mounting bracket
(5) Hole for safety-rope
(6) Fixation screw
(7) Service-lid
(8) Focus-screw
(9) Mirror cylindre



(10) DMX-Out socket
(11) DMX-In socket
(12) Blackout-socket
(13) Microphone
(14) Sensitivity-control
(15) Fuseholder
(16) Power supply
(17) DIP-switches

INSTALLATION

Installing/Replacing the lamp

DANGER TO LIFE!
Only install the lamp with the device switched off!
Unplug from mains before!

For the installation, you need one EFR 15 V/150 W GZ-6,35 lamp.

CAUTION!
The lamp has to be replaced when it is damaged

During the operation, the lamp reaches temperatures of up to 600° C.

Before replacing the lamp, unplug mains lead and let the lamp cool down (approx. 5 minutes).

During the installation do not touch the glass-bulbs bare-handed! Please follow the lamp manufacturer's notes!

Do not install lamps with a higher wattage! Lamps with a higher wattage generate temperatures the device was not designed for. Damages caused by non-observance are not subject to warranty.

Procedure:

Step 1: Unscrew the fixation screw(s) of the service lid.
Step 2: Remove the service lid.
Step 3: If replacing the lamp, remove the old lamp from the socket.
Step 4: Insert the EFR 15 V/150 W GZ-6,35 lamp into the lamp-socket.
Step 5: Replace the service lid and tighten the screw(s).

Do not operate this device with opened service lid!

Rigging

DANGER OF FIRE!
When installing the device, make sure there is no highly-inflammable material (decoration articles, etc.) within a distance of min. 0.5 m.

Mount the projector with the mounting-bracket to your trussing system using an appropriate clamp. The hole in the mounting bracket has a diameter of 10 mm.

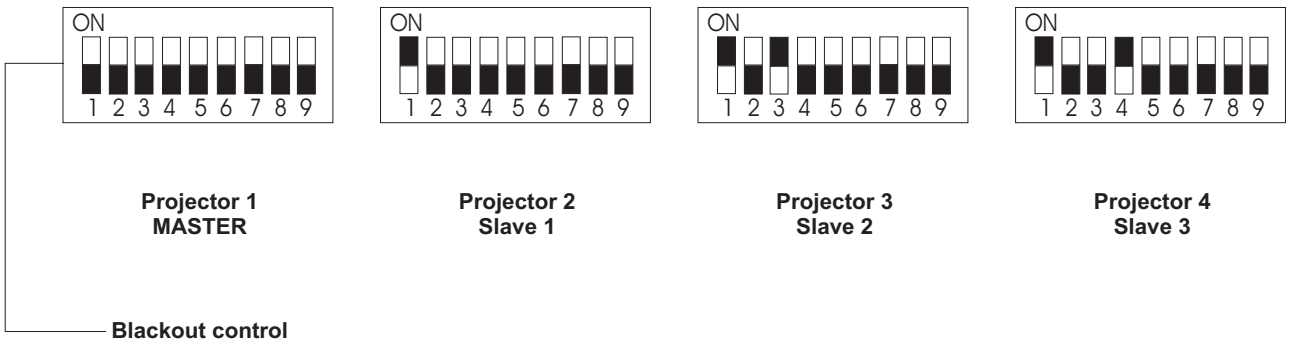
For overhead use, always install a safety-rope that can hold at least 10 times the weight of the fixture. Install the safety-rope at the whole in the mounting-bracket.

Adjust the desired inclination-angle via the mounting-bracket and fix the bracket-screws tightly.

Master/Slave-operation

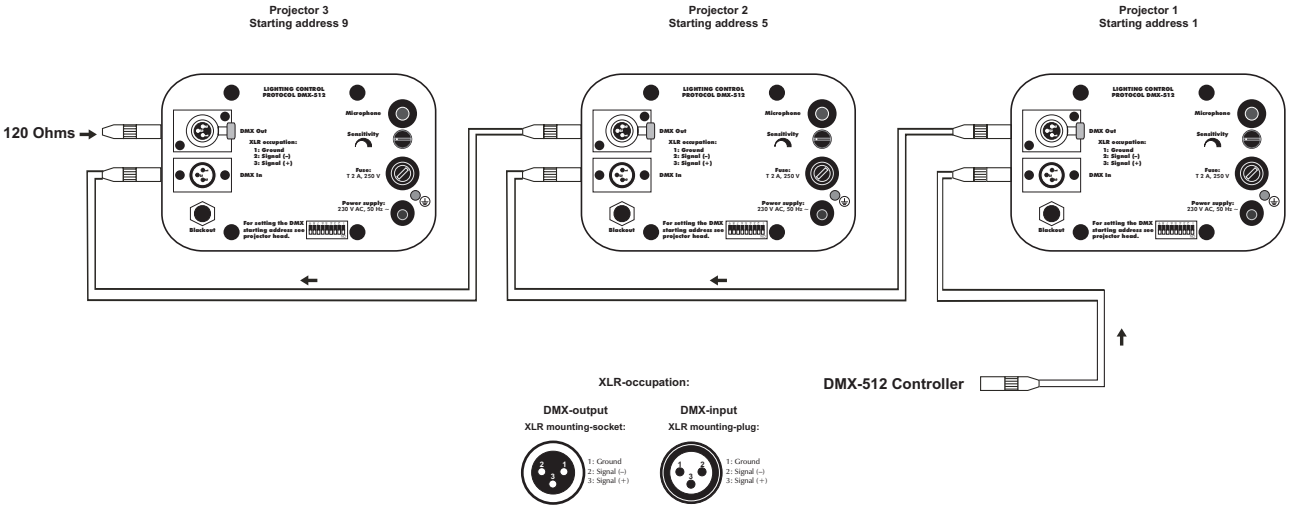
The master/slave-operation enables that several devices can be synchronized and controlled by one master-device.
On the rear panel of the TB-3 you can find an XLR-jack (DMX Out) and an XLR-plug (DMX In), which can be used for connecting several devices.
Choose the device which is to control the effects. This device then works as master-device and controls all other slave-devices, which are to be connected to the master-device via a balanced microphone lead. Connect the DMX OUT-jack with the DMX IN-plug of the next device.

Occupation of the DIP-switches:



If you wish to lock the light output - e.g. via an optional footswitch (Blackout-mode), connect your footswitch via a mono-jack plug to the Blackout-socket.

DMX-512 connection / connection between fixtures



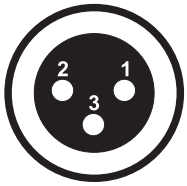
The wires must not come into contact with each other, otherwise the fixtures will not work at all, or will not work properly.

Only use a stereo shielded cable and 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

Occupation of the XLR-connection:

DMX-output

XLR mounting-socket:



DMX-input

XLR mounting-plug:

If you are using controllers with this occupation, you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

Building a serial DMX-chain:
Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 Ω resistor between Signal (–) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

Addressing

Each projector occupies 4 channels. To ensure that the control signals are properly directed to each projector, the projector requires adressing. This is to be done for every single projector by changing the DIP switches as set out in this table.

The starting address is defined as the first channel from which the TB-3 will respond to the controller. If you set, for example, the address to channel 5, the TB-3 will use the channel 5 to 8 for control.

Please make sure that you don't have any overlapping channels in order to control each TB-3 correctly and independently from any other fixture on the DMX data link. If two, three or more TB-3 are addressed similarly, they will work similarly.

Occupation of the DIP-switches:

Setting the DMX-starting address:	DIP-switch no.	1	2	3	4	5	6	7	8	9
Projector number & channels	Starting address	1	2	4	8	16	32	64	128	256
Projector 1 - channels 1-4	On	▲								
	Off		▽	▽	▽	▽	▽	▽	▽	▽
Projector 2 - channels 5-8	On	▲		▲						
	Off		▽		▽	▽	▽	▽	▽	▽
Projector 3 - channels 9-12	On	▲			▲					
	Off		▽	▽		▽	▽	▽	▽	▽
Projector 4 - channels 13-16	On	▲		▲	▲					
	Off		▽			▽	▽	▽	▽	▽
Projector 5 - channels 17-20	On	▲				▲				
	Off		▽	▽	▽		▽	▽	▽	▽

Connection with the mains

This device falls under protection-class I. The electric connection must be carried out by a qualified employee.

Connect the fixture to the mains with the power-plug.

The occupation of the connection-cables is as follows:

Cable	Pin	International
Brown	Live	L
Blue	Neutral	N
Yellow/Green	Earth	⏚

The earth has to be connected!

In general, lighting effects should not be connected to dimming-packs.

OPERATION

After you connected the effect to the mains, the TB-3 starts running. During the Reset, the motors are trimmed and the device is ready for use within approximately 20 seconds.

Sound-control/Master/Slave-operation

The lamp is automatically ignited as soon as the condensor microphone receives music signals. If the projector does not react to the music signals, the microphone sensitivity is too low. You can adjust the sensitivity with the rotary-control on the rearpanel.

You can do without a controller as the TB-3 features a built-in microphone, which provides automatic sound control.

If you have connected a footswitch to the Blackout-socket, you can lock the light output (Blackout-mode) and turn it on again.

Please note: If you wish to change from one operating mode into another, you either have to switch off the lamp/activate Blackout-mode or unplug the projector from the mains and plug it again.

DMX-controlled operation

You can control the projectors individually via your DMX-controller. Every DMX-channel has a different occupation with different features. In order to call up the different features, you first have to ignite the lamp (control channel 4, DMX-value 6-63).

DMX-protocol

Control channel 1 - Mirror cylindre rotation

DMX-value	Feature
0	Static
1-63	Anti-clockwise rotation with increasing speed 63 = V_{max}
64	Static
65-127	Clockwise rotation with increasing speed 127 = V_{max}
128	Static
129-191	Anti-clockwise rotation with decreasing speed 129 = V_{max}
192	Static
193-255	Clockwise rotation with decreasing speed 193 = V_{max}

Control channel 2 - not occupied

Control channel 3 - Colour-wheel

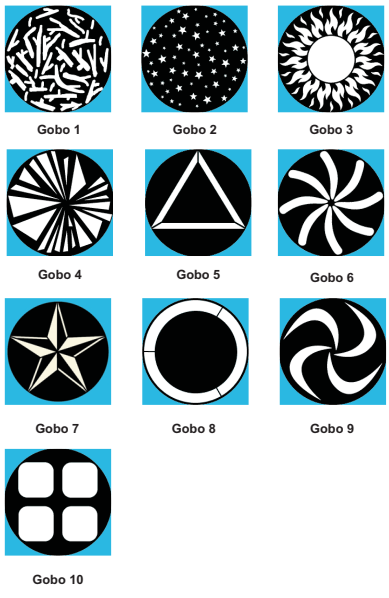
Linear colour change following the movement of the slider. In this way you can stop the colour-wheel in any position.

DMX-value	Feature
0-15	White
16-31	Purple
32-47	Green
48-63	Yellow
64-79	Red
80-95	Pink
96-111	Orange
112-127	Dark blue
128-255	White

Control channel 4 - Gobo-wheel

DMX-value	Feature
0-5	Lamp off
6-63	Open
64-127	Strobe-effect from slow to fast (max. 5 flashes/second)
128-132	Closed
133-135	Reset
136-143	Open
144-141	Closed
152-159	Gobo 1
160-167	Gobo 2
168-175	Gobo 3
176-183	Gobo 4
184-191	Gobo 5
192-199	Gobo 6
200-207	Gobo 7
208-215	Gobo 8
216-231	Gobo 9
232-255	Gobo 10 (Multicolour yellow/magenta)

Gobo-selection:



CLEANING AND MAINTENANCE

DANGER TO LIFE!
Disconnect from mains before starting maintenance operation!

We recommend a frequent cleaning of the device. Please use a soft lint-free cloth moistened with any good glass cleaning fluid. Never use alcohol or solvents!
There are no servicable parts inside the device except for the lamp and the fuse. Maintenance and service operations are only to be carried out by authorized dealers.
Please refer to the instructions under "Installing/Replacing the lamps".

Replacing the fuse

If the lamp burns out, the fine-wire fuse of the device might fuse, too. Only replace the fuse by a fuse of same type and rating (T 2 A, 250 V).
Before replacing the fuse, unplug mains lead.
Procedure:

Step 1: Unscrew the fuseholder on the rearpanel with a fitting screwdriver from the housing (anti-clockwise).
Step 2: Remove the old fuse from the fuseholder.
Step 3: Install the new fuse in the fuseholder.
Step 4: Replace the fuseholder in the housing and fix it.

CAUTION!
The lens has to be replaced when it is obviously damaged, so that its function is impaired, e. g. due to cracks or deep scratches!

Should you need any spare parts, please use genuine parts.
Should you have further questions, please contact your dealer.

TECHNICAL SPECIFICATIONS

Power supply:	230 V/50 Hz
Power consumption:	200 W
DMX-control-channels:	16/14
DMX-512-connection:	3-pin XLR
Blackout-connection:	¼" mono jack
Sound-control:	via built-in microphone
Radiation angle:	18°
Range of action:	3 - 6 m
Flash-rate:	1-5 Hz
Number of colours:	7 dichroic + white
Number of gobos:	9 gobos, 1 bicolor-gobo and open
Dimensions (LxWxH):	445 x 225 x 140 mm
Weight:	6 kg
Fitting lamps:	EFR 15 V/150 W GZ-6,35
Maximum ambient temperature t_a:	45° C
Maximum housing temperature t_B (steady state):	70° C
Fuse:	T 2 A, 250 V

Please note: errors and omissions for every information given in this manual excepted. Every information is subject to change without prior notice. 3/00 ©

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